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EXAMINER

LONSBERRY, HUNTER B

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 11/05/2004

23

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/400,447

Applicant(s)

BASTIEN ET AL.

Examiner

Hunter B. Lonsberry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21, 23, 24, 27, 29-37 and 39 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-21, 23, 24, 27, 29-37 and 39 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 September 1999 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim 23 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 12/15/2003 have been fully considered but they are not persuasive.

1) Applicant argues that there is no motivation to combine Erlin, Hurta, Hazra and Chaney, with the various subcombinations of Holtey, Yu, Merritt, which applicant considers, along with Hurta to be non-analogous art.

In response to applicant's argument that Holtey, Yu, Merritt and Hurta are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Erlin discloses a credit card reader coupled to a set top box. Chaney discloses a smartcard which carries conditional access information which is coupled to a set top box. Hazra, Hurta, Holtey, Yu, and Merritt are all directed towards teaching about smart cards as well as credit/debit systems, and the access/protection of credit and debit information. As both Erlin and Chaney are directed to utilizing credit cards and smart cards in a video environment, Hazra, Hurta, Holtey, Yu, and Merritt are analogous art, as they teach how that information may be stored, and protected as

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applicants claims are directed to a combination video access/financial access environment.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Erlin discloses a credit card reader coupled to a set top box. Chaney discloses a smartcard which carries conditional access information which is coupled to a set top box. Házra, Hurta, Holtey, Yu, and Merritt are all directed towards teaching about smart cards as well as credit/debit systems, and the access/protection of credit and debit information. One skilled in the art at the time of invention would have recognized the need to protect credit card information from theft and store credit information locally so that it could be debited for purchases, without having to contact a credit provider to provide authorization for each purchase.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, 10-12, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,870,155 to Erlin in view of U.S. Patent 6,317,721 to Hurta and U.S. Patent 5,473,609 to Chaney.

Regarding claim 1, Erlin discloses in figure 4, a receiver/decoder 40 attached to a TV 42, a remote control 10 with a built in card reader (column 2, lines 38-61) for reading banking/credit information when the card is swiped through the card reader (column 1, lines 43-53, column 2, lines 38-61). Erlin does not disclose the use of a user's smart card or modifying information on a smart card in response to a payment or modifying the information on the smart card remotely. Hurta discloses a smart card 66 which is used to pay for tolls or other services, a user inserts the smart card into a machine similar to an ATM and inserts money or transfers funds from a credit account, this amount is then stored on the smart card and debited for each use of the smart card (column 5, line 63-column 6, line 40, column 8, line 46-column 9, line 33). Chaney discloses a smart card within a user's receiver, a user may add or delete premium channels, the receiver is then tuned to a specified channel and receives a CA_CSS byte directed specifically to that smart card which changes the cards conditional access setup for differing services (column 6, line 66- column 7, line 20). Therefore, it would have been obvious to one skilled in the art at the time of invention to utilize the credit card reader of Erlin to read credit information and to modify Erlin to store credit information on a smart card as taught by Hurta and enable remote manipulation of smart card data as taught by Chaney, thus enabling a smart card to store credit and

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entitlement information, and enable the smart card to pay for services at a number of different devices.

Regarding claim 4, Erlin discloses that the credit card information is read along with an amount to debit the credit account (column 5, lines 1-53).

Regarding claim 5, Erlin discloses that the receiver/decoder 40 may be used in conjunction with an ATM card to pay for goods or services. The system Erlin inherently receives authorization information from a remote center as the user's bank or other financial institution must be contacted prior to funds being released to pay/credit for services/goods to be rendered, otherwise the service provider would not be paid.

Regarding claim 10, Erlin discloses that a user may enter their banking information in order to order casino cash, which may be picked up at the casino cashier (column 4, line 64-column 6, line 2).

Regarding claim 11, Erlin discloses that a user may purchase products from a home shopping network, interactive games or movies. Erlin inherently allows a user to input a request to purchase an item otherwise a user would not know how much money to debit their credit account.

Regarding claim 12, Erlin discloses in Figures 6D and E that a user may enter and confirm a PIN number (column 5, lines 18-27).

Regarding claim 20, Erlin discloses using a PIN number in Figures 6D and E.

Regarding claim 21, Erlin discloses that the remote control utilizes a DES encryption chip 65 (Figure 3, column 4, lines 18-20).

Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,870,155 to Erlin in view of U.S. Patent 6,317,721 to Hurta, U.S. Patent 5,473,609 to Chaney and U.S. Patent 5,748,908 to Yu.

Regarding claim 17, Erlin discloses in Figures 6A-H a method of ordering items and services in which a receiver/decoder 40 at a user site is used to select an item/service for purchase, sends bank/credit card information to a remote site for verification and transmitting the order for services/products such as a request for casino cash, and utilizes DES encryption (column 4, lines 17-20, line 64-column 6, line 2). Erlin/Hurta/Chaney do not disclose utilizing DES encryption to verify a remote center, but instead utilizes it to encrypt an IR signal. Yu discloses a credit/debit card transaction system in which both the credit/debit cardholder's identity and the identity of a retailer are verified prior to a sales transaction being completed (column 13, line 14-column 14, line 5). Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Erlin/Hurta/Chaney to transmit DES encrypted credit card information and to verify a retailer as taught by Yu in order to make sure that money is properly routed to its intended recipient.

Regarding claim 19, Erlin discloses in Figures 6A-H, a method of ordering items and services via a users ATM/credit card and checks if the credit card is valid (column 6, line 1-2).

Claims 23, 33, 37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,870,155 to Erlin in view of U.S. Patent 5,351,296 to Sullivan.

Regarding claim 23, Erlin discloses a combined remote control/card reader in Figure 1 with a casing, which is used to transmit financial information and enter a PIN number, and utilizes a DES chip 65 for encrypting the data (Figures 6a-h, column 4, line 64-column 5, line 43, column 4, lines 18-20). Erlin does not disclose combining the PIN with a random number prior to transmission. Sullivan discloses combining a PIN number with random bits to create a 16 digit (64bit) number, this number is then DES encrypted (column 14, line 35-column 15, line 43). Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Erlin to encrypt the PIN number with DES encryption and utilize a random number prior to transmitting financial information thereby providing an extra layer of security to prevent a third party from viewing financial information.

Regarding claim 24, Erlin discloses that the remote control utilizes an IR beam for transmitting data (column 2, lines 62-64).

Regarding claims 33 and 37, Erlin discloses that a user transmits a PIN number, which is input via a remote control to a set top box (column 5, lines 18-59).

Regarding claim 39, Erlin discloses that a user transmits a PIN number, which is input via a remote control to a set top box (column 5, lines 18-59). Erlin does not disclose transmitting the PIN number to a television. The examiner takes official notice that remote controls may communicate directly with a television. Therefore, it would

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have been obvious to one skilled in the art at the time of invention to modify Erlin/Sullivan to communicate directly with a television thereby reducing making it easier for a user to connect to a CATV network, as no additional connections to a set top box are required.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,870,155 to Erlin in view of U.S. Patent 5,351,296 to Sullivan in further view of U.S. Patent 6,317,721 to Hurta.

Regarding claim 36, Erlin discloses in figure 4, a cable set top box 40 attached to a TV 42, a remote control 10 with a built in card reader (column 2, lines 38-61) for reading banking/credit information when the card is swiped through the card reader (column 1, lines 43-53, column 2, lines 38-61). Erlin does not disclose the use of a user's smart card or reading information on a smart card. Hurta discloses a smart card 66 which is used to pay for tolls or other services, a user inserts the smart card into a machine similar to an ATM and inserts money or transfers funds from a credit account, this amount is then stored on the smart card and read and debited for each use of the smart card (column 5, line 63-column 6, line 40, column 8, line 46-column 9, line 33). Therefore, it would have been obvious to one skilled in the art at the time of invention to utilize the credit card reader of Erlin to read credit information and to modify Erlin to store credit information on a smart card as taught by Hurta, thus enabling a smart card to store credit information, and enable the smart card to pay for services at a number of different devices.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,870,155 to Erlin.

Regarding claims 13 and 14, Erlin discloses that the apparatus may be a remote control, which communicates with a set-top box (column 5, lines 53-59). Erlin does not disclose a combined set-top box and card reader. The examiner takes official notice that the use of a set-top box with an integrated card reader is well known for use in the digital satellite receiver art in order to provide authorization information to the decoder. Therefore, it would have been obvious to one skilled in the art to modify Erlin to include a card reader in a set top box to allow a user to order goods and services even if the remote control has been misplaced or lost.

Claims 2, 3, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,870,155 to Erlin in view of U.S. Patent 5,473,609 to Chaney and U.S. Patent 5,491,827 to Holtey.

Regarding claims 2 and 3, Erlin discloses a remoter control with a card reader, which reads bank/credit cards (column 1, lines 43-53, column 2, lines 38-61). Erlin/Chaney do not disclose interacting with a card that contains a microprocessor. Holtey discloses in Figure 1, a card 3, with a microprocessor 10 and flash memory 103, which stores identification information such as a pin number (column 5, lines 10-25, column 6, lines 1-19). Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the credit card Erlin/Chaney to include the

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microprocessor and memory of Holtey in order to provide an extra security feature to protect the cards owner from having their credit card information stolen, and as a means for storing additional data on the credit card.

Regarding claim 15, Erlin discloses a remoter control with a card reader, which reads bank/credit cards (column 1, lines 43-53, column 2, lines 38-61) and allows a user to order a VOD movie (column 5, lines 48-51) for viewing on a TV 42. Erlin/Chaney does not disclose interacting with a card that contains a microprocessor or the use of bank/smart cards in a digital satellite receiver. Holtey discloses in Figure 1, a smart card 3, with a microprocessor 10 and flash memory 103 that stores identification information such as a pin number and readable by the microprocessor (column 5, lines 10-25, column 6, lines 1-19). Hurta discloses a smart card 66 which is used to pay for tolls or other services, a user inserts the smart card into a machine similar to an ATM and inserts money or transfers funds from a credit account, this amount is then stored on the smart card and debited for each use of the smart card (column 5, line 63-column 6, line 40, column 8, line 46-column 9, line 33). The examiner takes official notice that the use of smart cards as storage/authorization devices in digital satellite systems is well known. Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the credit card Erlin/Chaney to include the microprocessor and memory of Holtey, and to modify Erlin to store credit information on a smart card as taught by Hurta thus enabling a smart card to store credit information, and enable the smart card to pay for services at a number of different devices.

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Regarding claim 16, Erlin discloses that the receiver/decoder make be used at a hotel casino (column 1, lines 43-53). The examiner takes official notice that digital satellite systems are known to have a wide subscriber base with each subscriber utilizing a receiver/decoder to access programming and shopping services. Therefore, it would have been obvious to modify the combined system of Erlin/Chaney and Holtey in order to allow a plurality of end users to order programs and services.

Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,870,155 to Erlin in view of U.S. Patent 5,473,609 to Chaney and U.S. Patent 5,603,078 to Henderson.

Regarding claim 6, Erlin discloses a combination credit card/remote control that is used to order good services or TV programming (column 5, lines 39-52). Erlin does not disclose decoding or descrambling a video program in response to receiving authorization information. Henderson discloses a combination remote/card reader 100 that reads a magnetic card and allows for video services to be purchased and displayed upon authorization from a control/billing computer (column 4, line 43-column 5, line 20). Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Erlin to include the billing/control computer of Henderson in order to automate customer billing and provide a billing statement to a customer upon checking out of a hotel.

Regarding claims 7 and 8, Erlin discloses a combination credit card/remote control that is used to order good services or TV programming (column 5, lines 39-52).

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Erlin does not disclose storing credit information for purchasing products on the users magnetic card. Erlin does not disclose the use of a user's smart card or storing credit information on a smart card. Hurta discloses a smart card 66 which is used to pay for tolls or other services, a user inserts the smart card into a machine similar to an ATM and inserts money or transfers funds from a credit account, this amount is then stored on the smart card and debited for each use of the smart card (column 5, line 63-column 6, line 40, column 8, line 46-column 9, line 33). Therefore, it would have been obvious to one skilled in the art at the time of invention to utilize the credit card reader of Erlin to read credit information and to modify Erlin to store credit information on a smart card as taught by Hurta, thus enabling a smart card to store credit information, and enable the smart card to pay for services at a number of different devices.

Regarding claim 9, Erlin discloses a combination credit card/remote control, which is used to order good services or TV programming (column 5, lines 39-52). Erlin does not disclose storing credit information for purchasing products on the users magnetic card. Henderson discloses that the magnetic card may be used to store user/communication settings (column 9, lines 5-35). The examiner takes official notice that the use of an ATM card to buy multiple products at the same time is well known in the art. Therefore, it would have been obvious to one skilled in the art, at the time of invention to modify the combined system of Erlin and Henderson to enable a user to purchase a plurality of products at the same time thereby allowing a customer to make better use of their time.

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Claims 18 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,870,155 to Erlin in view of U.S. Patent 5,475,756 to Merritt, U.S. Patent 5,473,609 to Chaney, and U.S. Patent 5,787,154 to Hazra.

Regarding claims 18 and 27, Erlin discloses a combination credit card/remote control which is used to order good services or TV programming via an ATM card (column 5, lines 39-52). Erlin does not disclose utilizing a random number, which is passed between the user and the remote center, allowing a user customizable number, and enabling the user to input the random number. Merritt discloses an ATM system which utilizes a random number generator to encrypt random numbers which are passed back and forth between an ATM machine and a central bank, the number is stored locally so that the encrypted values may be compared (column 5, lines 18- column 6 line 20). Hazra discloses a smart card like authentication device in figure 5, in which a user may utilize a keypad to enter a PIN or a random number, the device then communicates with a telephone to authenticate the user (column 2, line 31-column 3, line 49). Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Erlin, to include a random number which is sent along with the PIN number a further authenticator as taught by Merritt and enabling a user to input the random number as an additional layer of security as taught by Hazra.

Claims 30- 32, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,870,155 to Erlin in view of U.S. Patent 5,473,609 to Chaney, U.S. 5,644,354 to Thompson in further view of U.S. Patent 5,475,756 to Merritt and U.S. Patent 5,787,154 to Hazra.

Regarding claims 30 and 31, Erlin discloses a combination credit card/remote control, which is used to order good services or TV programming via an ATM card (column 5, lines 39-52). Erlin does not disclose if the remote control is addressable or not or if this address is sent along with the random number and pin number. The examiner takes official notice that the use of addresses in wireless devices is well known in order to designate information which is to be sent to a specific device is well known in the art. Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Erlin to utilize an addressable remote control which sends the pin number, random number and address number in its communications in order to add an extra layer of security to financial transactions and guarantee that information is received at the proper devices.

Regarding claim 34, Erlin discloses that a user transmits a PIN number which is input via a remote control to a set top box (column 5, lines 18-59), the pin number is displayed on the user's television (Figure 6E). Merritt discloses an ATM system, which utilizes a random number generator to encrypt random numbers which are passed back and forth between an ATM machine and a central bank. Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Erlin to display the user's PIN number in addition to a random number to allow for troubleshooting the exchange of financial information.

Regarding claim 35, Erlin discloses that a user transmits a PIN number which is input via a remote control to a set top box (column 5, lines 18-59), the pin number is displayed on the user's television (Figure 6E). Merritt discloses an ATM system which

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utilizes a random number generator to encrypt random numbers which are passed back and forth between an ATM machine and a central bank. Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Erlin to transmit a random number back to a remote device as taught by Merritt in order to provide an additional an extra layer of security to financial transactions.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 4,849,613 to Eisele: Method and Device for Making an Electronic Authentication. This reference discloses creating a random number/PIN combination.

U.S. Patent 6,651,883-B2 to Schilling: Removable Card for Use in a Radio Unit. This reference discloses the use of combination credit/debit smartcards.

U.S. Patent 6,275,991 to Erlin: IR Transmitter with Integral Magnetic-Stripe ATM Type Credit Card Reader and Method Therefor. This references discloses a set top box which reads smart cards, and credit/debit cards.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 703-305-3234. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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HBL


HAITRAN
PATENT EXAMINER